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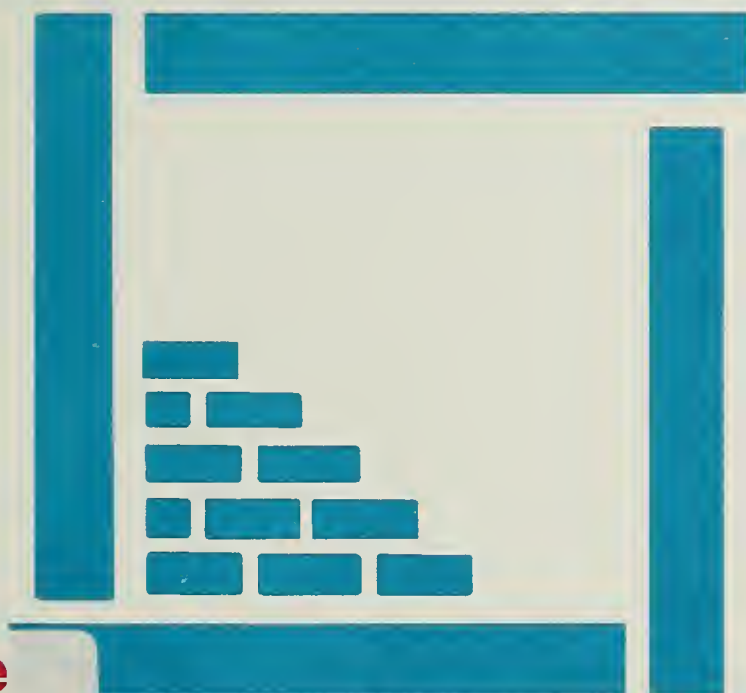
Census of Construction Industries

CC87-I-20

INDUSTRY SERIES

Water Well Drilling Special Trade Contractors

Industry 1781



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Many persons participated in the various activities of the 1987 Census of Construction Industries.

The overall planning and review of the census operations were performed by the staff of the Office of the Assistant Director for Economic and Agriculture Censuses.

This report was prepared in the Construction Statistics Division. **Barry A. Rappaport**, Assistant Division Chief for Industry Surveys, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **A. William Visnansky**, Chief, Census Operations Branch, with primary staff assistance by **Juliana Van Berkum**, **Barbara J. Hadden**, **Edward R. Glover**, **Susan L. Hostetter**, **Shirley M. Baker**, and **Carolyn J. Stone**. Under the direction of **Jesse Pollock**, **Edward K. Ricketts** and **Dennis K. Duke** developed the sampling plans and variance and estimation specifications.

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If you have any questions concerning the statistics in this report, call (301) 763-7546.

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Issued January 1990



U.S. Department of Commerce
Robert A. Mosbacher, Secretary
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Michael R. Darby, Under Secretary
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BUREAU OF THE CENSUS
C. L. Kincannon, Deputy Director

Charles A. Waite, Associate Director for
Economic Programs
Roger H. Bugenhagen, Assistant Director for
Economic and Agriculture Censuses

Thomas L. Mesenbourg, Chief,
Economic Census Staff

CONSTRUCTION STATISTICS DIVISION
Leonora M. Gross, Chief

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PURPOSE AND USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source of facts about the structure and functioning of the Nation's economy. They provide essential information for government, business, industry, and the general public.

Economic censuses furnish an important part of the framework for such composite measures as the gross national product, input-output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policy-making agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries, and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic censuses every 5 years, covering years ending in 2 and 7. The 1987 Economic Censuses consist of the—

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1987 Census of Agriculture and 1987 Census of Governments are conducted separately.) The next economic censuses are scheduled to be taken in 1993 covering the year 1992.

AVAILABILITY OF THE DATA

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office, and on microfiche, computer tape, compact discs with read-only memory, and flexible diskettes, for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Census Bureau, Washington, DC 20233. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State and Business and Industry Data Centers in many States also supply economic census statistics.

WHAT'S NEW IN 1987

Several changes have taken place for the 1987 censuses. Data will be reported on the basis of the newly revised Standard Industrial Classification (SIC) system with selected reports including "bridge tables," linking the old and new classification systems. A new set of metropolitan

areas has been adopted, and more detailed information will be available for businesses with no paid employees. For additional information on these changes, review the subsequent text.

One important change involves receipts of contractors and builders. Prior to 1987, the Census of Construction Industries collected receipts as the primary measure of construction activity. For 1987, the census collected the "value of construction work done" to better measure actual construction activity done during the year. Differences between the two concepts occur when work is done in one year and payment received either from the prior or in the succeeding year. In addition, receipts do not include work a contractor performs for its own account and use.

HISTORICAL INFORMATION

The economic censuses have been taken together as an integrated program at 5-year intervals since 1967, and before that for 1963, 1958, and 1954. Prior to that time, the individual censuses were taken separately at varying intervals.

The economic censuses trace their beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 manufactures census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade, and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 economic censuses were the first to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. These were the first censuses to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records have also been used to provide basic statistics as well for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic censuses, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The Census of Construction Industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The Census of Transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 are publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in

other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic censuses in 1972 along with the Survey of Women-Owned Businesses.

Economic censuses have also been taken in Puerto Rico since 1909, in the Virgin Islands and Guam since 1958, and in the Northern Mariana Islands since 1982.

Statistical reports from the 1982 and earlier censuses provide historical figures for the study of long-term time series, and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the censuses provide complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Construction Reports* (building permits, housing starts, and value of new construction put in place), *Current Business Reports* (retail and wholesale trade and service industries), the *Annual Survey of Manufactures*, *Current Industrial Reports*, and the *Quarterly Financial Report*. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the censuses. The *County Business Patterns* program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1987 Economic Censuses and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1987 Economic Censuses*. Contact Customer Services for information on availability.

CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1987 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property

into lots as defined in the 1987 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction—The SIC manual defines construction in three broad types of activity that follow:

1. **Building construction by general contractors or by operative builders**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors**—Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors**—These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

In addition to the industries classified in the SIC manual as Construction, this census also includes one industry

classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. These establishments are engaged in subdividing real property into lots and in developing it for sale on their own account.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1987. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

A revised edition of the SIC Manual was issued in 1987. Minor modifications were made to three industries in the construction sector: SIC 1611, Highway and Street Construction Contractors, Except Elevated Highways; SIC 1629, Heavy Construction Contractors, N.E.C; and SIC 1771, Concrete Work Special Trade Contractors. The extent of these modifications are explained in the specific texts for those industries. "Bridge tables" are also included showing selected data tabulated using both the previous classification system and the 1987 revision.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1987. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

¹Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

If an establishment engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1987 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1987 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1987 Census of Construction Industries were identified as part of an operation common to all 1987 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies—This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative records data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1987 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1987 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample—The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with estimated total employment of 20 employees or more, and a probability sample of single-establishment companies with estimated employment of fewer than 20 employees.

Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 533,000 single-establishment employer companies initially classified as construction companies, 147,000 were included in the sample. All of the 13,000 establishments of multiestablishment companies were included in the sample. There was a net increase in the sample of 60,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan

area or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1987 and 1982 data—

Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1987 and 1982 published here are simple unbiased estimates of the form:

$$x'_c = \sum_{i=1}^{n_c} x_i / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the

sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1987 Census of Construction Industries was obtained from employer establishments primarily through the use of twenty-four questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179 and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and appropriate advisory groups. The Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1987 census report forms were mailed out in December 1987. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1988.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all

revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1987 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical locations of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries, results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1987 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, land receipts are also subtracted from dollar value of business done.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1987 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, DC, 20233.

To discuss a special tabulation before submitting specifications, call 301-763-7546.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1987 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the Census of Construction.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others, and costs for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from dollar value of business done. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- (X) Not applicable.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employment size	By size class of dollar value of business done	By type, class, ownership, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment.....	3					
End of year—total.....	1, 3	1	5	6		
End of year—buildings, machinery and equipment.....	3					
Depreciation charges during year—buildings, machinery and equipment.....	3					
Capital expenditures:						
Total capital expenditures.....	1, 3	1	5	6		
New buildings—machinery and equipment.....	3					
Used buildings—machinery and equipment.....	3					
Communication services, costs for.....	2					
Employees:						
All employees—average number.....	1, 2	1	5	6		8
Construction workers—average number.....	1, 2, 9	1, 9				
Other employees—average number.....	2					
Employer costs for fringe benefits—legally required and voluntary expenditures.....	2					
Establishments—number in business during year.....	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total.....	1, 2, 9	1, 9	5	6		
Quarterly.....	2, 9	9				
Inventories.....	4					
Materials, components, supplies, and fuels—costs for.....	1, 2	1	5	6		
Payroll:						
First quarter, all employees.....	2					
Annual:						
All employees.....	1, 2	1	5	6		8
Construction workers.....	1, 2	1				
Other employees.....	2					
Power, fuels, and lubricants—costs for.....	2					
Proprietors and working partners.....	2					
Ratios, State.....	13	13				
Value and receipts:						
Dollar value of business done, total.....	2		5	6	11	
Value of construction work, total.....	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others.....	2					
Other business receipts and land receipts ²	2					
Net value of construction work.....	1, 2	1	5	6		8
Value added.....	1, 2	1	5	6		8
Rental costs:						
Total.....	1, 2	1	5	6		
For machinery and equipment.....	2					
For buildings.....	2					
Repairs to buildings and other structures.....	2					
Repairs to machinery and equipment.....	2					
Selected industry ratios.....	12					
Subcontract work to others, costs for.....	1, 2	1	5	6		8

Note: Data for 1982 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work. Ownership—private or government owned.

²Land receipts are shown separately for SIC's 1531 and 6552 only.

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in water well drilling and servicing water wells. For additional examples, refer to the 1987 Standard Industrial Classification (SIC) Manual published by the Office of Management and Budget, Executive Office of the President.

During 1987, the establishments with paid employees classified in this industry accounted for \$1.4 billion in total dollar value of business. Of this amount, \$1.3 billion were for the value of construction work. These establishments paid out \$496 million for materials, components, and supplies and \$30.8 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for this industry were \$62.2 million. Value added for 1987 was \$780 million.

There were 3,414 establishments with total employment averaging 17,598 during the year. Total payroll for 1987 was \$335 million. Total hours worked by construction workers during the year were 25.7 million hours.

Larger establishments with 20 employees or more, while representing only 4 percent of the total number of employer establishments in this industry accounted for 28 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have excluded the value of work in progress during the calendar year. Receipts may have also excluded work done by builders engaged in construction for sale on their own account or for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

1987 
1982 

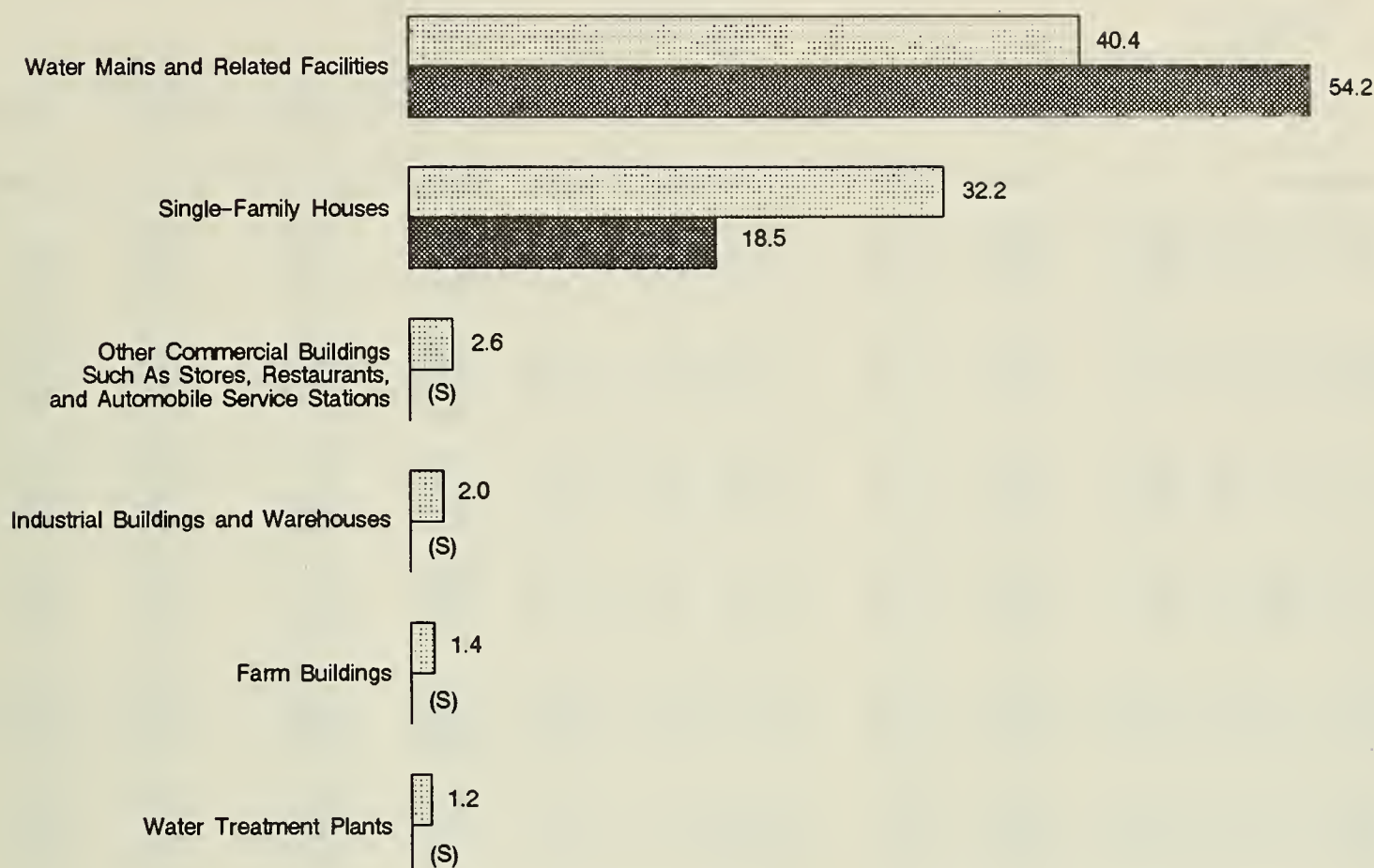
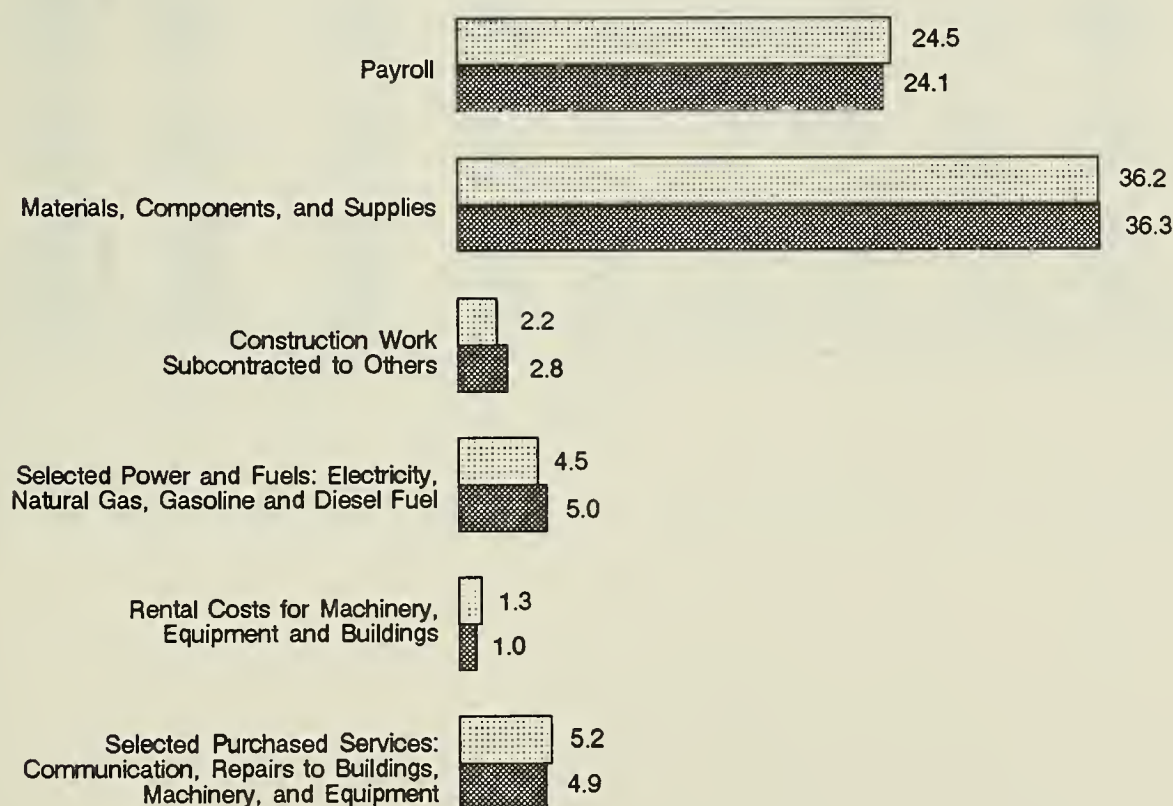


Figure 2. **Selected Costs Per Dollar Value of Business Done**
(Percent)

1987 
1982 



For meaning of abbreviations and symbols, see introductory text.

Table 1. General Statistics for Establishments With Payroll by State: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1987							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States	3 414	17 598	13 628	335 171	248 510	25 724	1 330 056	1 299 288
Alabama	38	146	118	1 657	1 360	217	7 710	7 533
Alaska	6	46	38	1 100	860	58	4 372	(D)
Arizona	52	312	245	4 991	4 265	450	23 387	22 857
Arkansas	55	237	169	2 937	2 054	257	16 021	15 682
California	206	1 598	1 242	39 168	27 485	2 284	147 661	144 607
Colorado	69	262	184	4 189	3 027	316	16 441	16 238
Connecticut	49	315	234	7 757	4 991	426	30 642	30 113
Delaware	19	133	104	2 573	1 929	*237	11 483	11 059
District of Columbia	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida	225	1 229	961	21 854	16 773	2 010	88 155	85 817
Georgia	60	384	291	5 857	4 623	581	24 045	23 551
Hawaii	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho	*17	*64	*50	*910	*738	*102	*2 693	*2 684
Illinois	84	508	389	11 129	8 410	803	44 119	43 426
Indiana	98	487	369	8 251	6 186	618	31 527	31 225
Iowa	41	203	164	3 067	2 506	239	14 441	13 706
Kansas	*18	121	93	2 518	1 911	212	9 573	(D)
Kentucky	*24	70	60	682	605	102	2 825	2 799
Louisiana	32	220	172	4 014	2 590	289	12 837	12 691
Maine	42	181	138	3 911	2 729	*278	15 591	15 554
Maryland	46	469	367	10 419	7 687	760	36 406	35 734
Massachusetts	60	378	292	8 545	5 676	394	29 631	28 466
Michigan	186	778	585	15 260	11 519	1 257	66 649	65 997
Minnesota	116	555	443	11 137	8 533	948	47 594	46 266
Mississippi	40	389	297	5 666	3 745	615	25 398	24 584
Missouri	63	297	235	3 820	3 204	475	16 457	16 134
Montana	45	155	114	2 165	1 550	136	8 494	8 344
Nebraska	85	335	245	5 946	4 540	437	25 119	24 848
Nevada	34	71	57	1 390	1 138	121	8 598	8 529
New Hampshire	43	179	127	5 133	3 338	258	18 609	18 262
New Jersey	79	566	442	14 272	10 279	747	49 814	48 361
New Mexico	59	191	143	3 000	2 060	204	10 787	10 560
New York	157	897	733	20 069	15 447	1 310	68 799	66 688
North Carolina	146	803	622	11 634	9 064	1 270	47 870	46 684
North Dakota	*35	44	31	(D)	390	36	4 254	4 194
Ohio	102	387	295	5 805	4 699	525	26 136	25 402
Oklahoma	27	115	83	1 673	1 329	164	5 956	5 935
Oregon	53	169	114	2 960	1 986	162	12 179	12 039
Pennsylvania	139	848	685	17 011	13 043	1 279	66 009	64 575
Rhode Island	18	76	61	1 818	1 384	141	7 709	7 644
South Carolina	50	294	238	5 468	4 055	559	19 316	19 159
South Dakota	11	26	19	344	270	21	1 892	1 871
Tennessee	34	192	136	2 954	2 165	262	13 241	(D)
Texas	262	1 062	819	18 922	13 826	1 650	73 803	70 856
Utah	9	20	14	(D)	190	19	930	(D)
Vermont	13	57	43	1 635	1 216	72	6 210	6 173
Virginia	105	753	606	12 428	9 511	1 054	50 279	48 822
Washington	88	365	284	8 027	5 948	467	36 127	35 658
West Virginia	44	152	124	*2 156	*1 649	*274	8 480	*8 012
Wisconsin	75	328	246	6 012	4 532	495	25 829	25 202
Wyoming	38	74	56	1 004	859	70	4 247	4 052

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	O	B	H	M	
779 621	557 958	30 768	17 527	61 724	637 309	17 153	1 013 886	577 507	2	2	5	U.S.
4 651	3 244	177	100	222	2 880	184	12 696	(D)	12	9	30	AL
3 142	1 286	(D)	*70	*168	3 227	(S)	(S)	(S)	16	(D)	57	AK
12 659	10 715	530	*132	2 316	14 018	274	18 869	10 902	9	4	7	AZ
6 317	9 573	339	(S)	*278	5 532	266	18 695	10 475	10	15	48	AR
90 038	60 141	3 054	2 514	3 437	43 697	1 596	97 149	54 869	4	4	9	CA
9 099	7 260	202	231	949	8 304	353	22 265	13 213	15	12	22	CO
19 203	(D)	529	282	2 031	10 185	191	9 430	5 645	8	6	12	CT
6 785	(D)	424	*146	271	*6 663	50	2 197	1 477	25	31	23	DE
(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	(D)	(D)	(D)	DC
53 803	34 583	2 338	1 475	6 740	42 789	1 055	57 853	31 200	8	8	21	FL
12 573	12 125	494	*436	1 668	10 278	404	25 152	14 094	9	12	20	GA
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	HI
*2 362	*1 505	*9	(S)	*15	*9 709	84	3 270	1 829	48	41	66	ID
26 919	(D)	692	673	3 295	15 053	437	27 039	15 613	8	7	6	IL
17 858	13 635	302	114	823	14 498	318	18 766	11 092	17	8	14	IN
5 733	(D)	*734	53	*538	*11 192	172	8 547	4 861	25	24	41	IA
5 170	4 567	(D)	34	(D)	(D)	391	23 903	14 665	12	(D)	(D)	KS
1 497	(D)	25	*35	(S)	(S)	(S)	(S)	(S)	32	29	(S)	KY
7 659	(D)	146	*360	188	6 414	330	18 031	7 647	13	12	10	LA
11 403	4 179	36	*47	*909	11 607	79	3 651	*1 347	24	22	72	ME
23 545	12 589	672	646	1 759	20 883	341	15 295	8 482	10	12	12	MD
18 291	(D)	1 165	658	1 319	10 129	197	11 900	7 181	13	11	13	MA
34 167	(D)	652	661	2 303	25 946	527	25 474	14 570	9	11	21	MI
26 077	20 767	*1 327	1 005	4 226	37 113	580	38 356	25 312	11	11	19	MN
12 382	13 126	813	249	776	14 740	277	24 050	14 413	18	12	29	MS
7 082	9 140	323	45	921	14 733	317	23 431	12 574	11	14	32	MO
6 194	4 817	*150	(S)	*436	2 369	187	9 052	4 784	19	25	45	MT
11 729	13 154	270	39	384	8 868	521	33 765	18 676	7	10	3	NE
5 181	(D)	*69	*147	*370	*3 600	115	(D)	3 600	4	6	48	NV
12 641	5 845	*346	*421	2 184	16 988	99	6 084	3 331	9	11	30	NH
29 011	20 145	1 452	492	1 553	12 532	384	27 751	16 898	5	6	8	NJ
6 278	4 517	(S)	62	158	*5 956	171	8 362	4 879	27	23	29	NM
42 801	26 880	2 111	478	4 111	19 407	585	35 860	20 489	6	6	24	NY
29 666	19 098	1 185	218	2 895	25 999	501	26 321	14 140	12	11	29	NC
2 480	(D)	*60	(D)	(D)	*2 874	175	9 164	4 713	11	25	(D)	ND
14 801	10 753	733	174	1 320	11 165	427	24 627	16 012	15	12	19	OH
3 798	(D)	21	218	28	*4 822	371	22 066	14 716	28	28	25	OK
7 236	4 870	140	272	199	2 895	159	7 157	4 495	33	28	19	OR
43 826	23 799	1 433	1 115	5 176	39 356	557	28 956	17 499	6	9	27	PA
5 074	(D)	65	(D)	498	3 573	(D)	5 134	3 644	1	1	2	RI
11 942	(D)	157	226	71	6 053	143	7 223	3 940	20	20	20	SC
1 054	(D)	21	20	(D)	*479	156	7 173	4 222	(W)	(W)	(D)	SD
6 673	6 164	(D)	74	58	7 734	234	13 722	7 648	21	(D)	37	TN
43 177	31 812	2 946	1 282	1 664	54 739	2 126	132 189	68 350	7	7	18	TX
601	377	(D)	(S)	(S)	1 100	(S)	(S)	(S)	31	(D)	(S)	UT
4 526	(D)	37	32	(D)	4 789	*73	*2 997	*1 963	8	12	(D)	VT
26 400	23 588	1 457	728	1 799	21 569	438	22 744	12 830	10	9	28	VA
22 904	13 116	468	700	1 168	15 568	334	19 374	11 782	9	9	33	WA
4 201	*4 147	*468	(S)	114	(S)	71	2 808	1 556	36	42	(W)	WV
14 551	11 104	627	*258	*1 693	7 390	297	16 447	9 238	12	14	43	WI
2 102	(D)	(S)	*22	(D)	1 755	(S)	(S)	(S)	34	29	(D)	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year	3 414	3 551	4 305	4 159	2	3	3	5
Proprietors and working partners	1 150	1 633	2 900	3 239	7	5	5	6
All employees**	17 598	17 153	22 352	17 136	2	3	2	3
Construction workers:								
March	12 735	13 183	17 296	13 020	2	2	2	4
May	14 035	13 974	19 683	14 642	2	2	2	4
August	14 357	13 862	19 518	15 146	2	2	2	4
November	13 391	12 429	18 276	13 817	2	3	2	4
Average	13 628	13 703	18 720	14 598	2	2	2	4
Other employees:								
March	3 768	3 448	3 518	2 499	3	3	2	5
May	3 993	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
August	3 983	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
November	4 129	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Average	3 969	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March	5 822	5 850	(NA)	(NA)	3	3	(NA)	(NA)
April to June	6 635	6 227	(NA)	(NA)	3	3	(NA)	(NA)
July to September	6 874	6 303	(NA)	(NA)	3	3	(NA)	(NA)
October to December	6 392	5 645	(NA)	(NA)	3	3	(NA)	(NA)
Total hours worked	25 724	24 026	(NA)	(NA)	3	2	(NA)	(NA)
Payroll, all employees	335 171	248 983	237 036	125 147	2	2	1	3
Payroll, construction workers	248 510	190 161	188 307	101 967	2	2	1	4
Payroll, other employees	86 660	58 821	48 730	23 180	2	2	2	3
First quarter payroll, all employees	72 899	60 129	49 963	(NA)	2	2	1	(NA)
Employer costs for fringe benefits, all employees	67 655	48 559	40 020	(NA)	2	3	1	(NA)
Legally required expenditures	50 550	34 246	28 803	(NA)	2	3	2	(NA)
Voluntary expenditures	17 104	14 313	11 217	(NA)	3	2	2	(NA)
Dollar value of business done	1 368 347	1 031 674	1 118 330	556 965	2	2	2	4
Value of construction work ¹	1 330 056	1 013 886	1 090 418	534 171	2	2	2	4
Value of construction work subcontracted in from others	213 779	116 796	126 042	52 572	6	5	4	8
Land receipts ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts	38 291	17 788	27 912	22 794	9	8	12	8
Net value of construction work [†]	1 299 288	984 884	1 077 767	523 128	2	2	2	4
Value added ^{††}	779 621	577 507	628 789	325 847	2	2	2	4
Selected costs	588 726	454 167	489 541	231 118	2	2	2	4
Materials, components, and supplies ³	495 741	374 019	435 442	220 075	2	2	2	4
Construction work subcontracted to others	30 768	29 001	12 651	11 043	5	3	4	9
Selected power, fuels, and lubricants	62 217	51 145	41 449	(NA)	2	3	2	(NA)
Electricity	5 169	3 430	3 481	(NA)	3	5	2	(NA)
Natural gas	883	827	890	(NA)	8	9	9	(NA)
Gasoline and diesel fuel	51 794	43 361	33 113	(NA)	2	3	2	(NA)
On highway use	37 230	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use	14 564	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
Other, including lubricating oils and greases	4 369	3 526	3 965	(NA)	7	6	4	(NA)
Rental cost for machinery, equipment, and buildings	17 527	10 758	10 962	(NA)	5	5	5	(NA)
For machinery and equipment	9 767	6 262	8 173	4 042	8	5	7	8
For buildings	7 759	4 496	2 789	(NA)	5	6	4	(NA)
Selected purchased services	71 366	50 284	49 788	(NA)	3	3	2	(NA)
Communication services	15 363	9 294	7 309	(NA)	3	3	3	(NA)
Repairs to buildings and other structures	3 727	2 505	2 110	(NA)	10	8	7	(NA)
Repairs to machinery and equipment	52 275	38 483	40 369	(NA)	3	3	2	(NA)
Ownership of construction projects:								
Value of construction work ¹	1 330 056	1 013 886	1 090 418	534 171	2	2	2	4
Government owned	207 653	177 264	176 967	110 082	4	8	3	6
Federal	50 606	(NA)	(NA)	(NA)	13	(NA)	(NA)	(NA)
State and local	157 047	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Privately owned	1 122 402	836 621	913 451	424 089	3	3	2	4

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

²Data were collected separately for establishments classified in SIC 1531, Operative Builders, and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

³For 1972, includes data for power, fuels, and lubricants.

Table 3. **Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	601 127	511 523	4	3
Capital expenditures, other than land -----	61 724	33 820	5	8
New -----	43 707	25 114	6	10
Used -----	18 017	8 705	8	10
Retirements and disposition of depreciable assets -----	25 541	21 333	7	7
End-of-year gross book value of depreciable assets -----	637 309	524 010	4	3
Depreciation charges during year -----	68 796	64 255	4	4
Buildings and other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	78 674	65 432	11	7
Capital expenditures, other than land -----	8 577	2 222	10	20
New buildings and other structures -----	5 030	1 799	14	25
Used buildings and other structures -----	3 547	423	15	24
Retirements and disposition of depreciable assets -----	2 255	1 921	28	10
End-of-year gross book value of depreciable assets -----	84 996	65 733	10	7
Depreciation charges during year -----	5 387	5 764	7	10
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	522 452	446 090	4	3
Capital expenditures, other than land -----	53 147	31 597	5	8
New machinery and equipment, including automobiles and trucks -----	38 676	23 315	7	11
New automobiles and trucks, intended primarily for highway use -----	20 647	9 233	8	8
Used machinery and equipment, including automobiles and trucks -----	14 470	8 281	8	9
Retirements and disposition of depreciable assets -----	23 286	19 411	7	7
End-of-year gross book value of depreciable assets -----	552 313	458 276	4	3
Depreciation charges during year -----	63 409	58 491	5	4

Table 4. Value of Inventories for Establishments With Payroll: 1987 and 1986

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 414	2
Value of construction work	1 330 056	2
Establishments with inventories:		
Number	1 737	5
Value of construction work	800 698	3
Inventories ¹ :		
End of 1987, materials and supplies	45 278	7
End of 1986, materials and supplies	41 361	7
Establishments with no inventories:		
Number	1 099	7
Value of construction work	286 490	7
Establishments not reporting:		
Number	578	9
Value of construction work	242 868	7

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1987										
Number of establishments	3 414	2 215	766	299	118	14	-	-	-	-
All employees**	17 598	4 478	4 776	3 916	3 548	878	-	-	-	-
Payroll, all employees	335 171	58 917	84 220	83 983	86 291	21 759	-	-	-	-
Construction worker hours (thousands)	25 724	5 951	7 135	5 651	5 603	1 382	-	-	-	-
Dollar value of business done	1 368 347	350 945	342 032	292 329	306 194	76 846	-	-	-	-
Value of construction work ¹	1 330 056	342 721	331 610	283 242	299 910	72 572	-	-	-	-
Net value of construction work†	1 299 288	336 848	326 586	276 035	289 180	70 637	-	-	-	-
Value added††	779 621	195 495	198 215	177 635	168 247	40 027	-	-	-	-
Cost of materials, components, supplies, and fuels	557 958	149 577	138 793	107 487	127 216	34 884	-	-	-	-
Cost of construction work subcontracted to others	30 768	5 873	5 023	7 206	10 730	1 935	-	-	-	-
Rental cost for machinery, equipment, and buildings	17 527	3 035	4 432	5 936	3 154	968	-	-	-	-
Capital expenditures, other than land	61 724	13 891	18 342	14 172	15 318	(D)	-	-	-	-
End-of-year gross book value of depreciable assets	637 309	185 505	172 286	147 556	112 377	19 584	-	-	-	-
1982										
All employees**	17 153	4 806	4 321	3 419	3 087	914	605	-	-	-
Total construction receipts ¹	1 013 886	264 415	225 234	190 549	214 354	74 175	45 158	-	-	-
Value added††	577 507	146 319	130 647	108 389	126 112	39 190	26 848	-	-	-
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	2	4	6	4	3	(W)	-	-	-	-
Net value of construction work†	2	4	6	4	2	(W)	-	-	-	-
Capital expenditures, other than land	5	11	14	11	7	(D)	-	-	-	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments -----	3 414	(S)	(S)	476	1 208	808	365	202	61	10	1
All employees** -----	17 598	(S)	(S)	750	3 309	3 805	3 092	3 517	2 283	603	(D)
Payroll, all employees -----	335 171	(S)	(S)	6 399	39 050	63 215	62 140	86 588	58 326	17 874	(D)
Construction worker hours (thousands) -----	25 724	(S)	(S)	832	4 187	5 463	4 802	5 348	3 760	1 055	(D)
Dollar value of business done -----	1 368 347	(S)	(S)	34 311	205 452	289 836	244 247	304 405	204 165	78 895	(D)
Value of construction work ¹ -----	1 330 056	(S)	(S)	33 902	197 976	284 210	236 302	296 355	274 335	(D)	(D)
Net value of construction work† -----	1 299 288	(S)	(S)	33 638	194 715	278 937	231 601	289 399	264 145	(D)	(D)
Value added†† -----	779 621	(S)	(S)	19 274	114 506	165 846	140 029	184 037	111 962	40 051	(D)
Cost of materials, components, supplies, and fuels -----	557 958	(S)	(S)	14 772	87 684	118 716	99 517	113 412	85 495	35 362	(D)
Cost of construction work subcontracted to others -----	30 768	(S)	(S)	264	3 261	5 272	4 700	6 955	6 708	3 482	(D)
Rental cost for machinery, equipment, and buildings -----	17 527	(S)	(S)	187	1 842	3 202	3 268	5 898	2 195	835	(D)
Capital expenditures, other than land -----	61 724	(S)	(S)	950	7 658	13 062	11 977	15 552	8 709	3 632	(D)
End-of-year gross book value of depreciable assets -----	637 309	(S)	(S)	24 511	89 860	161 808	129 660	138 429	68 912	20 145	(D)
1982											
All employees** -----	17 153	526	424	1 244	3 195	3 707	2 839	2 747	1 185	817	466
Total construction receipts ¹ -----	1 013 886	6 574	11 257	51 141	158 539	208 186	177 213	190 936	98 463	75 419	36 156
Value added†† -----	577 507	3 366	5 742	27 806	87 637	116 554	105 051	112 169	56 302	41 173	21 704
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	(S)	(S)	11	7	7	6	4	(W)	(W)	(D)
Net value of construction work† -----	2	(S)	(S)	10	6	7	7	4	(W)	(D)	(D)
Capital expenditures, other than land -----	5	(S)	(S)	26	14	15	13	14	2	(W)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction ²	Maintenance and repair				
	A	B	C	D	A	B	C	D
1987								
Value of construction work ¹	1 330 056	835 156	97 644	239 010	2	2	6	3
Building construction	561 220	403 350	56 946	100 924	3	4	8	5
Single-family houses	428 005	313 752	41 538	72 715	4	4	9	5
Single-family houses, detached	411 246	303 345	39 212	68 688	4	4	9	5
Single-family houses, attached	16 759	10 406	*2 325	4 027	17	16	42	23
Apartment buildings with two or more apartments	4 645	3 963	(S)	499	16	14	(S)	25
Other residential buildings, including hotels and motels	15 956	9 584	1 611	*4 760	24	23	32	47
Hotels and motels	3 839	2 476	*1 008	354	18	13	52	18
Other residential buildings, excluding hotels and motels	12 116	7 107	602	*4 405	31	31	7	51
Office buildings	11 425	8 163	1 846	1 415	15	17	20	18
Other commercial buildings such as stores, restaurants, and automobile service stations	34 028	23 920	6 359	3 749	5	6	5	21
Industrial buildings and warehouses	26 704	18 283	1 641	6 779	9	10	20	10
Industrial buildings	22 280	14 212	1 598	6 468	10	12	20	10
Warehouses	4 424	4 070	(S)	*310	7	5	(S)	42
Religious buildings	2 332	1 744	*39	*549	22	20	65	46
Educational buildings	2 777	1 852	*669	255	14	10	45	32
Hospitals and institutional buildings	3 336	2 521	*517	297	10	4	56	20
Farm buildings	18 561	12 126	2 058	4 376	16	20	34	19
Amusement, social, and recreational buildings	2 399	(D)	(D)	402	19	(D)	(D)	24
Other nonresidential buildings	11 046	(D)	(D)	*5 124	23	(D)	(D)	42
Nonbuilding construction	610 591	431 806	40 698	138 086	3	3	9	5
Conservation and development construction	5 298	4 383	-	915	33	33	-	33
Water mains and related facilities	536 710	381 537	34 331	120 840	3	4	8	5
Sewage treatment and water treatment plants	17 600	11 085	2 659	3 855	10	13	19	3
Sewage treatment plants	2 144	1 032	542	569	(W)	(W)	(W)	(W)
Water treatment plants	15 455	10 053	2 116	3 285	11	14	24	3
Other nonbuilding construction	50 983	34 801	3 708	12 476	12	12	74	2
Construction work, n.s.k.	158 244	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
1982								
Value of construction work ¹	1 013 886	688 150	(NA)	325 735	2	3	(NA)	3
Building construction	236 067	165 976	(NA)	70 091	4	4	(NA)	6
Single-family houses	187 845	135 534	(NA)	52 310	5	5	(NA)	6
Single-family houses, detached	186 418	134 503	(NA)	51 914	5	5	(NA)	6
Single-family houses, attached	1 426	1 030	(NA)	395	16	14	(NA)	36
Other buildings	48 222	30 442	(NA)	*17 781	2	18	(NA)	41
Nonbuilding construction	573 730	363 986	(NA)	209 743	2	3	(NA)	3
Water mains and related facilities	549 036	345 555	(NA)	203 481	3	3	(NA)	3
Other nonbuilding construction	24 694	18 431	(NA)	6 262	4	13	(NA)	32
Construction work, n.s.k.	204 088	158 187	(NA)	45 900	5	5	(NA)	5

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.
²In 1982, data for additions, alterations, or reconstruction were collected separately for SIC 1521, 1522, 1531, 1541, and 1542. For all other industries, data are included with "New construction."

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1987

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
All establishments -----	3 414	17 598	335 171	1 330 056	1 174 182	1 299 288	779 621	30 768	2	2	5
Establishments not specializing by type -----	101	921	18 487	74 125	(NA)	72 655	41 879	1 470	2	2	5
Establishments specializing 51 percent or more -----	3 312	16 677	316 684	1 255 930	1 174 182	1 226 632	737 742	29 297	9	9	20
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	1 290	6 055	110 236	438 252	387 701	431 965	267 555	6 286	4	4	16
Establishments with —											
100 percent specialization -----	605	2 275	37 944	151 811	151 811	149 491	92 028	2 319	8	8	26
90 to 99 percent specialization -----	306	1 553	29 528	117 507	110 107	116 514	74 406	*993	10	9	47
80 to 89 percent specialization -----	184	823	15 804	71 190	58 887	70 332	43 547	858	11	12	24
70 to 79 percent specialization -----	125	817	16 049	54 990	40 702	53 420	35 556	*1 570	12	12	41
60 to 69 percent specialization -----	67	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
WATER MAINS AND RELATED FACILITIES											
All establishments specializing in type -----	1 069	6 866	141 223	540 023	524 292	522 644	299 959	17 379	4	3	5
Establishments with —											
100 percent specialization -----	1 014	6 181	124 348	490 674	490 674	475 973	271 023	14 700	4	4	5
90 to 99 percent specialization -----	*11	58	1 102	*5 670	*5 207	*5 491	3 680	179	25	43	13
80 to 89 percent specialization -----	*17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
70 to 79 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
60 to 69 percent specialization -----	18	382	10 301	24 117	14 664	22 903	15 108	1 214	10	7	(W)
51 to 59 percent specialization -----	5	95	2 663	8 829	5 060	8 183	5 537	646	24	14	(W)

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
	A	B	C	D	E	F	G
United States	3 414	13 628	25 724	12 735	5 822	14 035	6 635
Alabama	38	118	217	120	54	122	58
Alaska	6	38	58	34	13	39	15
Arizona	52	245	450	225	101	245	116
Arkansas	55	169	257	163	58	184	78
California	206	1 242	2 284	1 148	509	1 253	570
Colorado	69	184	316	173	67	214	82
Connecticut	49	234	426	221	95	240	107
Delaware	19	104	*237	105	*56	106	*61
District of Columbia	1	(D)	(D)	(D)	(D)	(D)	(D)
Florida	225	961	2 010	931	494	1 017	525
Georgia	60	291	581	287	140	311	147
Hawaii	2	(D)	(D)	(D)	(D)	(D)	(D)
Idaho	*17	*50	*102	*59	*21	*59	*27
Illinois	84	389	803	354	164	392	212
Indiana	98	369	618	279	139	346	157
Iowa	41	164	239	153	51	172	63
Kansas	*18	93	212	84	45	110	64
Kentucky	*24	60	102	55	21	57	24
Louisiana	32	172	289	159	67	187	81
Maine	42	138	*278	126	*63	143	*71
Maryland	46	367	760	354	180	376	195
Massachusetts	60	292	394	271	85	323	99
Michigan	186	585	1 257	524	271	591	314
Minnesota	116	443	948	407	202	458	239
Mississippi	40	297	615	307	153	323	175
Missouri	63	235	475	229	114	238	128
Montana	45	114	136	103	26	113	30
Nebraska	85	245	437	221	91	234	104
Nevada	34	57	121	43	23	65	34
New Hampshire	43	127	258	121	57	123	64
New Jersey	79	442	747	424	165	445	184
New Mexico	59	143	204	144	51	145	53
New York	157	733	1 310	644	280	756	340
North Carolina	146	622	1 270	625	311	647	331
North Dakota	*35	31	36	(D)	(D)	(D)	(D)
Ohio	102	295	525	256	106	303	130
Oklahoma	27	83	164	95	43	81	39
Oregon	53	114	162	92	28	125	*51
Pennsylvania	139	685	1 279	613	277	699	316
Rhode Island	18	61	141	58	31	66	36
South Carolina	50	238	559	226	113	247	144
South Dakota	11	19	21	17	4	21	6
Tennessee	34	136	262	137	76	137	65
Texas	262	819	1 650	799	380	844	427
Utah	9	14	19	*12	3	18	5
Vermont	13	43	72	41	17	43	17
Virginia	105	606	1 054	600	260	625	276
Washington	88	284	467	271	99	277	121
West Virginia	44	124	*274	107	*59	*117	*63
Wisconsin	75	246	495	203	101	263	130
Wyoming	38	56	70	54	18	54	18

¹Construction workers during pay periods including 12th of March, May, August, and November.

Payroll by State: 1987

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
14 357	6 874	13 391	6 392	2	3	2	3	2	3	2	3	2	3	U.S.
126	54	107	48	11	14	19	15	6	13	6	14	14	15	AL
43	15	38	13	16	19	15	16	19	21	15	17	17	20	AK
282	115	229	117	9	10	11	10	9	8	11	13	9	8	AZ
181	69	150	50	17	6	19	10	21	10	15	5	19	2	AR
1 340	627	1 226	577	4	5	3	5	3	5	4	5	4	5	CA
164	86	184	79	12	12	18	20	11	13	14	15	10	7	CO
251	116	225	107	6	4	7	3	6	3	6	4	7	4	CT
100	*61	105	*58	29	50	36	56	28	48	22	42	28	56	DE
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	DC
979	514	918	476	8	10	7	10	8	11	8	11	9	10	FL
302	151	266	143	10	15	12	16	10	16	10	14	10	15	GA
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	HI
*60	*30	*24	*23	42	51	48	46	48	53	47	55	54	48	ID
414	221	395	205	8	11	10	11	8	11	9	13	7	11	IL
445	165	405	156	13	10	8	8	10	9	18	11	22	13	IN
169	62	161	61	24	32	24	37	24	30	24	31	23	31	IA
100	51	81	51	14	16	9	11	21	22	15	19	9	9	KS
72	30	*58	*25	36	33	36	23	35	36	40	38	45	45	KY
175	75	166	65	15	8	15	5	16	8	15	9	15	11	LA
143	*68	139	*74	26	60	29	66	22	52	22	54	31	70	ME
371	195	367	188	10	16	10	17	10	16	9	15	10	17	MD
306	103	271	105	13	17	12	19	14	18	13	15	13	19	MA
645	363	581	307	9	12	10	13	9	12	8	11	10	13	MI
466	261	443	244	13	16	13	17	12	16	12	15	14	17	MN
289	159	270	127	19	11	19	12	19	11	20	12	20	19	MS
248	121	226	111	11	11	10	11	11	10	11	11	13	12	MO
123	47	120	32	20	22	32	37	24	24	26	38	13	20	MT
285	129	242	112	7	12	8	12	7	11	7	13	9	14	NE
65	33	56	30	3	23	18	30	4	22	4	21	13	28	NV
132	60	134	76	8	15	8	15	8	15	8	11	10	19	NH
469	202	430	194	4	3	8	4	5	3	4	3	4	3	NJ
157	50	129	48	25	33	27	35	27	36	23	23	25	39	NM
771	338	759	350	7	9	6	9	7	10	6	9	8	10	NY
642	327	574	300	12	17	11	16	12	17	12	17	11	16	NC
36	10	43	13	12	8	(D)	(D)	(D)	(D)	24	30	17	3	ND
336	154	286	133	14	9	16	13	13	9	13	7	14	9	OH
85	42	73	38	26	31	29	29	26	35	25	31	23	32	OK
136	47	*103	*34	26	36	18	16	22	43	27	34	41	48	OR
717	350	711	334	7	9	7	10	8	10	7	10	8	9	PA
62	36	59	36	(W)	3	5	6	2	4	2	2	5	4	RI
231	153	247	147	20	34	16	29	20	33	20	35	25	38	SC
22	6	17	4	(W)	9	(W)	7	(W)	8	(W)	8	(W)	12	SD
139	54	132	66	19	22	20	26	20	21	20	19	15	19	TN
822	444	813	398	7	8	7	8	7	8	7	9	7	8	TX
13	5	14	5	26	19	41	24	27	16	(W)	(W)	35	40	UT
47	19	44	18	5	6	6	2	5	7	5	7	5	7	VT
615	268	586	249	11	16	11	16	11	16	11	17	12	17	VA
291	128	298	118	11	10	13	15	12	12	9	8	11	10	WA
*118	*69	151	82	39	48	37	47	44	56	44	55	34	40	WV
268	135	252	127	12	19	13	19	14	21	13	20	13	18	WI
69	23	*50	10	34	26	34	31	34	30	34	31	47	14	WY

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1987					1982 construction receipts for work done in this State¹	Percent change 1987 (col A) to 1982 (col F)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State¹	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	1 330 056	3 381	1 245 260	570	84 795	1 013 886	31.2	2	2	6
Alabama -----	11 310	38	7 098	*12	4 211	19 550	-42.1	7	10	5
Alaska -----	4 360	6	4 360	-	-	8 800	-50.5	24	24	-
Arizona -----	17 064	50	(D)	1	(D)	24 791	-31.2	6	(D)	(D)
Arkansas -----	13 665	55	13 590	*5	*74	19 692	-30.6	12	12	51
California -----	148 313	206	(D)	*12	(D)	93 197	59.1	3	(D)	(D)
Colorado -----	15 609	69	15 445	*9	163	19 538	-20.1	12	12	20
Connecticut -----	31 220	49	30 010	14	1 209	10 392	200.4	5	6	(W)
Delaware -----	9 222	19	8 393	10	828	2 257	308.6	26	29	5
District of Columbia -----	(D)	1	(D)	-	-	(D)	(D)	(D)	(D)	-
Florida -----	87 884	225	85 750	*14	2 134	52 253	68.2	8	8	38
Georgia -----	23 474	60	21 375	11	2 098	23 773	-1.3	12	13	13
Hawaii -----	(D)	2	(D)	2	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	3 774	17	*2 693	*7	1 080	5 824	-35.2	31	41	32
Illinois -----	48 997	84	43 220	*17	5 776	29 249	67.5	7	7	33
Indiana -----	28 018	89	27 206	12	811	22 264	25.8	10	10	23
Iowa -----	12 730	40	(D)	2	(D)	8 448	50.7	23	(D)	(D)
Kansas -----	6 964	*18	(D)	2	(D)	24 273	-71.3	11	(D)	(D)
Kentucky -----	3 299	24	2 503	20	796	10 577	-68.8	25	33	17
Louisiana -----	16 023	32	12 837	*21	3 186	19 909	-19.5	12	12	40
Maine -----	16 952	42	15 447	8	*1 505	3 946	329.6	20	22	45
Maryland -----	41 914	46	35 649	33	6 265	15 678	167.3	11	12	34
Massachusetts -----	30 506	60	26 732	22	3 773	13 687	122.9	11	13	1
Michigan -----	68 693	186	66 571	7	2 122	30 046	128.6	10	11	8
Minnesota -----	48 620	116	46 918	5	1 702	32 679	48.8	11	11	(W)
Mississippi -----	21 633	40	20 650	*15	982	24 710	-12.5	13	14	6
Missouri -----	18 570	62	15 437	*16	3 132	21 273	-12.7	13	15	23
Montana -----	8 180	37	7 742	4	438	8 392	-2.5	31	33	(W)
Nebraska -----	24 277	85	(D)	1	(D)	29 231	-16.9	11	(D)	(D)
Nevada -----	12 292	34	(D)	*14	(D)	11 046	11.3	5	(D)	(D)
New Hampshire -----	19 742	43	16 790	12	2 951	5 116	285.9	9	11	2
New Jersey -----	48 567	79	47 577	14	*989	26 773	81.4	7	7	44
New Mexico -----	13 362	59	10 787	*17	2 575	9 958	34.2	19	23	20
New York -----	70 927	157	67 359	39	3 568	36 889	92.3	6	6	30
North Carolina -----	47 260	146	46 905	8	355	22 008	114.7	12	12	27
North Dakota -----	2 894	34	2 894	-	-	9 944	-70.9	37	37	-
Ohio -----	26 730	102	25 248	16	1 482	18 443	44.9	11	12	15
Oklahoma -----	6 352	27	(D)	*10	(D)	18 819	-66.2	26	(D)	(D)
Oregon -----	20 069	53	11 779	30	8 290	6 128	227.5	18	29	12
Pennsylvania -----	60 629	139	59 023	19	1 606	27 569	119.9	8	8	1
Rhode Island -----	4 907	18	(D)	1	(D)	2 699	81.8	1	(D)	(D)
South Carolina -----	19 371	49	(D)	2	(D)	14 554	33.1	15	(D)	(D)
South Dakota -----	1 885	11	1 736	*11	148	6 351	-70.3	2	(W)	25
Tennessee -----	14 125	34	11 458	15	*2 666	12 618	11.9	18	21	41
Texas -----	72 704	262	(D)	2	(D)	128 005	-43.2	7	(D)	(D)
Utah -----	1 521	8	(D)	1	(D)	5 801	-73.8	12	(D)	(D)
Vermont -----	6 030	13	5 123	3	907	*1 868	222.8	12	14	(W)
Virginia -----	50 789	104	48 295	33	*2 493	22 807	122.7	9	9	59
Washington -----	27 584	88	27 079	*4	504	19 051	44.8	12	12	24
West Virginia -----	7 260	36	6 296	9	964	4 167	74.2	29	33	2
Wisconsin -----	25 904	75	24 054	10	1 850	17 649	46.8	14	15	30
Wyoming -----	4 296	38	4 245	*9	*51	6 714	-36.0	30	31	42

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind of Business Activity: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	Dollar value of business done ¹		Relative standard error of estimate (percent)	
	1987	1982	1987	1982
All kinds of business.....	1 368 347	1 031 674	2	2
Heavy construction.....	16 165	19 922	15	14
Plumbing contractor.....	20 729	15 164	10	11
Water well drilling contractor.....	1 216 053	861 667	2	2
Millwright.....	11 063	1 756	16	25
Test boring or core drilling contractor.....	6 518	2 117	(W)	30
Other construction activities.....	20 967	(S)	7	(S)
Manufacturing.....	2 516	4 007	15	14
Rental of construction machinery or equipment to others.....	*2 059	387	49	8
Retail trade.....	17 677	9 667	13	10
Wholesale trade.....	4 933	275	20	36
Other activities.....	14 990	116 712	10	6
Kind of business activity, n.s.k.....	34 677	(S)	12	(S)

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 12. Selected Industry Ratios for Establishments With Payroll: 1987 and 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics			Relative standard error of estimate (percent) for 1987
	1987	1982	
AVERAGE PER ESTABLISHMENT			
Number of employees**.....	5.2	4.8	2
Number of construction workers.....	4.0	3.9	2
Number of all other employees.....	1.2	(NA)	2
Payroll, all employees..... \$1,000..	98.2	70.1	2
Payroll, construction workers..... do..	72.8	53.6	2
Payroll, other employees..... do..	25.4	16.6	2
Dollar value of business done..... do..	400.8	290.5	2
Value of construction work ¹ do..	389.6	285.5	2
Cost of materials, components, supplies, and fuels..... do..	163.4	119.7	2
Construction work subcontracted to others..... do..	9.0	8.2	5
Rental cost for machinery, equipment, and buildings..... do..	5.1	3.0	6
Capital expenditures, other than land..... do..	18.1	9.5	5
Gross book value of depreciable assets..... do..	186.7	147.6	4
AVERAGE PER EMPLOYEE			
Payroll, all employees..... do..	19.0	14.5	1
Dollar value of business done..... do..	77.8	60.1	1
Value added††..... do..	44.3	33.7	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers..... do..	18.2	13.9	1
Value of construction work ¹ do..	97.6	74.0	1
Construction worker hours.....	1 887.6	1 753.3	2
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees..... \$1,000..	21.8	(NA)	2
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK¹			
Payroll, all employees.....	.252	.246	1
Cost of materials, components, supplies, and fuels.....	.419	.419	1
Cost of construction work subcontracted to others.....	.023	.029	5
Rental cost for machinery, equipment, and buildings.....	.013	.011	5

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost for machinery, equipment, and buildings
United States	5.2	19.0	1 887.6	97.6	.252	.419	.023	.013
Alabama	3.8	11.3	1 839.0	65.3	.215	.421	.023	.013
Alaska	7.7	23.9	1 526.3	115.1	.252	.294	(D)	*.016
Arizona	6.0	16.0	1 836.7	95.5	.213	.458	.023	*.006
Arkansas	4.3	12.4	1 520.7	94.8	.183	.598	.021	(S)
California	7.8	24.5	1 839.0	118.9	.265	.407	.021	.017
Colorado	3.8	16.0	1 717.4	89.4	.255	.442	.012	.014
Connecticut	6.4	24.6	1 820.5	130.9	.253	(D)	.017	.009
Delaware	7.0	19.3	*2 278.8	110.4	.224	(D)	.037	*.013
District of Columbia	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida	5.5	17.8	2 091.6	91.7	.248	.392	.027	.017
Georgia	6.4	15.3	1 996.6	82.6	.244	.504	.021	*.018
Hawaii	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho	*3.8	*14.2	*2 040.0	*53.9	*.338	*.559	*.003	(S)
Illinois	6.0	21.9	2 064.3	113.4	.252	(D)	.016	.015
Indiana	5.0	16.9	1 674.8	85.4	.262	.432	.010	.004
Iowa	5.0	15.1	1 457.3	88.1	.212	(D)	*.051	.004
Kansas	*6.7	20.8	2 279.6	102.9	.263	.477	(D)	.004
Kentucky	*2.9	9.7	1 700.0	47.1	.241	(D)	.009	*.012
Louisiana	6.9	18.2	1 680.2	74.6	.313	(D)	.011	*.028
Maine	4.3	21.6	*2 014.5	113.0	.251	.268	.002	*.003
Maryland	10.2	22.2	2 070.8	99.2	.286	.346	.018	.018
Massachusetts	6.3	22.6	1 349.3	101.5	.288	(D)	.039	.022
Michigan	4.2	19.6	2 148.7	113.9	.229	(D)	.010	.010
Minnesota	4.8	20.1	2 140.0	107.4	.234	.436	*.028	.021
Mississippi	9.7	14.6	2 070.7	85.5	.223	.517	.032	.010
Missouri	4.7	12.9	2 021.3	70.0	.232	.555	.020	.003
Montana	3.4	14.0	1 193.0	74.5	.255	.567	*.018	(S)
Nebraska	3.9	17.7	1 783.7	102.5	.237	.524	.011	.002
Nevada	2.1	19.6	2 122.8	150.8	.162	(D)	*.008	*.017
New Hampshire	4.2	28.7	2 031.5	146.5	.276	.314	*.019	*.023
New Jersey	7.2	25.2	1 690.0	112.7	.287	.404	.029	.010
New Mexico	3.2	15.7	1 426.6	75.4	.278	.419	(S)	.006
New York	5.7	22.4	1 787.2	93.9	.292	.391	.031	.007
North Carolina	5.5	14.5	2 041.8	77.0	.243	.399	.025	.005
North Dakota	*1.3	(D)	1 161.3	137.2	(D)	(D)	*.014	(D)
Ohio	3.8	15.0	1 779.7	88.6	.222	.411	.028	.007
Oklahoma	4.3	14.5	1 975.9	71.8	.281	(D)	.004	.037
Oregon	3.2	17.5	1 421.1	106.8	.243	.400	.011	.022
Pennsylvania	6.1	20.1	1 867.2	96.4	.258	.361	.022	.017
Rhode Island	4.2	23.9	2 311.5	126.4	.236	(D)	.008	(D)
South Carolina	5.9	18.6	2 348.7	81.2	.283	(D)	.008	.012
South Dakota	2.4	13.2	1 105.3	99.6	.182	(D)	.011	.011
Tennessee	5.6	15.4	1 926.5	97.4	.223	.466	(D)	.006
Texas	4.1	17.8	2 014.7	90.1	.256	.431	.040	.017
Utah	2.2	(D)	1 357.1	66.4	(D)	.405	(D)	(S)
Vermont	4.4	28.7	1 674.4	144.4	.263	(D)	.006	.005
Virginia	7.2	16.5	1 739.3	83.0	.247	.469	.029	.014
Washington	4.1	22.0	1 644.4	127.2	.222	.363	.013	.019
West Virginia	3.5	*14.2	*2 209.7	68.4	*.254	*.489	*.055	(S)
Wisconsin	4.4	18.3	2 012.2	105.0	.233	.430	.024	*.010
Wyoming	1.9	13.6	1 250.0	75.8	.236	(D)	(S)	*.005

APPENDIX A.

Explanation of Terms

Construction—Is composed of three broad categories:

1. **New construction**—Includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators, and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations or reconstruction**—Includes construction activity making structural changes to existing facilities. Generally, this type of activity is considered a capital investment in the property.
3. **Maintenance and repair**—Includes construction done for the purpose of upkeep of property rather than additional investment in the property.

Examples of the general distinction between maintenance and repair and reconstruction are provided here: roof repairs, including the replacement of shingles, gutters, etc., are classified under maintenance and repairs. A complete reroofing, however, is classified as reconstruction.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees—Comprise all full-time and part-time employees on the payrolls of construction establishments, who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers—Includes all workers up through the working foreman level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment

operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working foreman level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1987.

Payroll—Includes the gross earnings paid in the calendar year 1987 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Employer costs for fringe benefits (supplemental labor costs)—Represents expenditures made by the employer during 1987 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions—Include Social Security contributions, unemployment compensation, workman's compensation, and State temporary disability payments.

Voluntary payments—Include life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done—Includes all value of construction work done during 1987 for construction work performed by general contractors, special trades contractors, subcontractors, and land development and improvement work. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include the value of buildings and other structures built or being built for sale in 1987 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators, etc., were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in the value of construction work done.)

Other business receipts—Includes business receipts not reported as value of construction work done or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work—Derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted to others, and costs for materials, components, supplies and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, land receipts are also subtracted from dollar value of business done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs—Represents the costs for materials, components, and supplies; costs for construction work subcontracted to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1987 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)
- freight and other direct charges should represent only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, are included in this item as are costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment, such as printing presses; computer systems; etc., which are not an integral part of a structure
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted to others include:

- all costs during 1987 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- The costs to the reporting establishment for its purchases of materials, components, and supplies, provided to a subcontractor for his use. Such costs are reported under a separate category, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal and coke products, etc.

Rental costs for machinery, equipment, and buildings—Includes all costs during 1987 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It

excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services—Includes all costs during 1987 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies, or from other establishments of the same company. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property, or the cost of adapting it for another use. Such costs are included in "capital expenditures".

Assets and depreciation—Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and, (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1987.

Capital expenditures—Refers to all costs actually incurred during 1987 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1987.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories—Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to report work in progress and finished units not sold for buildings and other structures built for sale.

Inventories of multi-establishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects—This item shows the distribution of the value of construction work done by ownership of the project, that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal, and State and local governments.

Value of construction work subcontracted in from others—Includes the value of construction work during 1987 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1987. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose, i.e, office and residential, or commercial, they were to classify the building by major purpose.

In addition all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (include townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures containing two or more housing units (excluding attached single-family houses and townhouses described above).
- **Hotels and motels**—Includes hotels, motels, and tourist cabins intended for transient accommodations.

- **Other residential buildings**—Includes dormitories, fraternity and sorority houses, nurses homes, and other nonhousekeeping residential structures.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more.
- **Other commercial buildings, such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are not included in this category, but under nonbuilding construction.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes nonresidential buildings which are not classified elsewhere, such as fire stations, prisons, civic centers, bus and air passenger terminals and hangars.

Nonbuilding construction:

- **Highways, streets and related work, such as installation of guardrails, highway signs, etc.**—Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Recreational facilities**—Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Bridges and elevated highways**—Includes viaducts and overpasses; roads, highways, railroads, and causeways built on structural supports.
- **Tunnels**—Includes highway, pedestrian, and railroad tunnels.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, levees, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities**—Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants, and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers, and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.

- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

APPENDIX B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Powerline Construction	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified
		6552	LAND SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES

APPENDIX C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

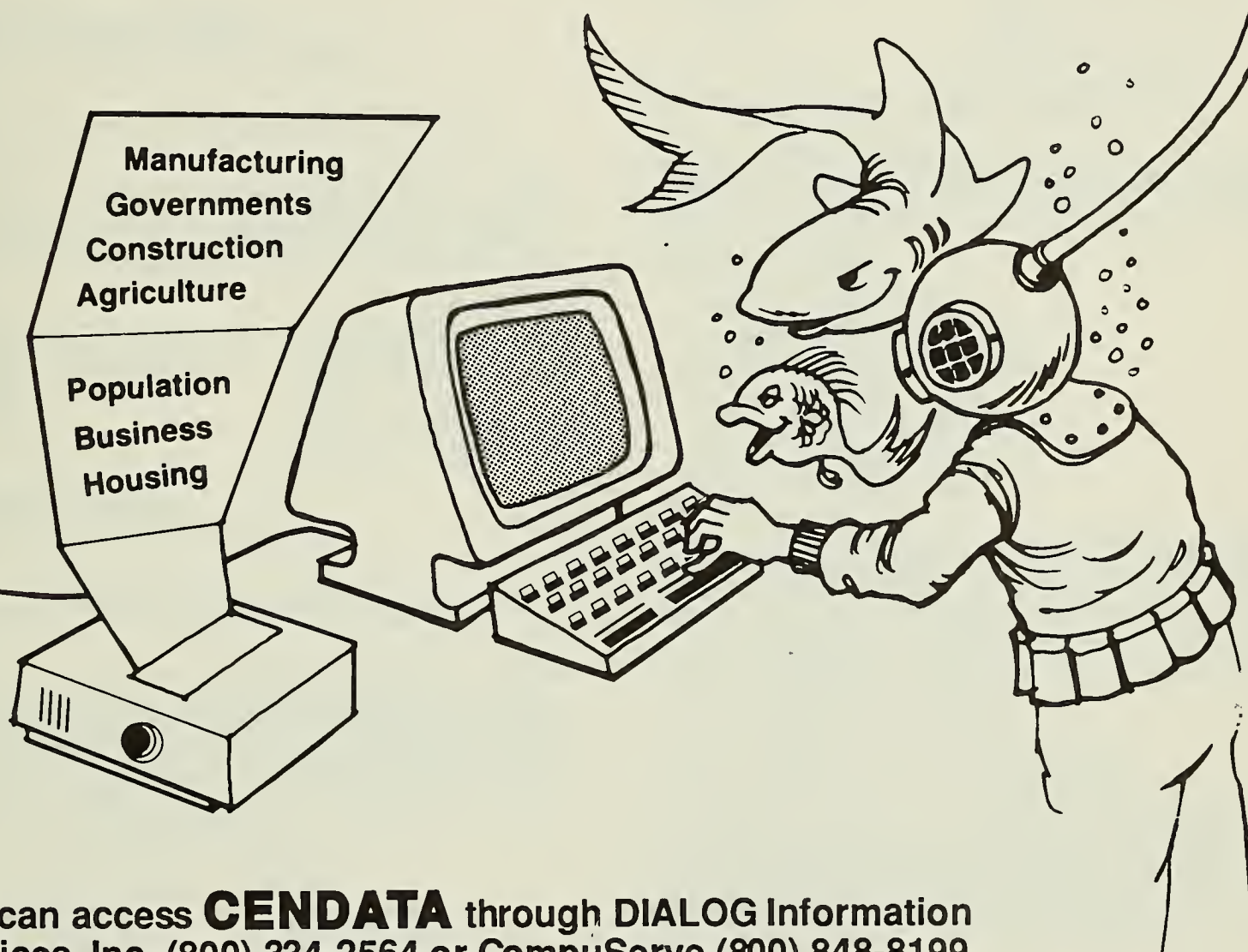
Alaska
California
Hawaii
Oregon
Washington

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PUBLICATION PROGRAM

1987 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)
- Land developers and subdividers

Data products in the Census of Construction Industries are issued in 4 publication series and in 3 other media:

- Printed reports [P]
- CD-ROM [C]
- Computer tape [T]
- Highlights online [+]

Preliminary Industry Series (CC87-I-1(P) through CC87-I-28(P))

(Available November 1988 through May 1989) [P]

Twenty-seven separate industry reports and a United States summary report, providing national statistics for establishments with payroll. Statistics shown for 1987 include:

- Number of establishments
- Number of employees
- Payroll
- Hours worked
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC87-I-1 through CC87-I-28)

(Available June 1989 through November 1989) [P] [C] [T] [+]

Twenty-seven separate industry reports and a United States summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC87-A-1 through CC87-A-10)

(Available January 1990 through March 1990) [P] [C] [T] [+]

Nine reports on the construction industries, representing each census geographic division, and a United States summary report. Regional reports provide detailed data for States and metropolitan statistical areas.

Subject Report—Legal Form of Organization and Type of Operation (CC87-S-1)

(Available May 1990) [P]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUSES REPORTS

The Census of Construction Industries is part of the 1987 Economic Censuses. These are conducted at five-year intervals in years ending in 2 and 7 and consist of seven separate censuses:

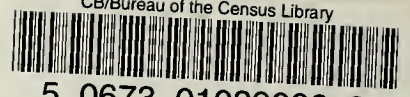
- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the Census of Outlying Areas, including separate economic censuses of Puerto Rico and other outlying areas. The Census of Agriculture and Census of Governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233. If you have any questions, call Census Customer Services 1-(301)-763-4100.

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Water Well Drilling Special Trade Contractors

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